



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
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May 11, 2010

Dr. Gregory J. Thorpe, Ph.D., Manager
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

SUBJECT: Federal Final Environmental Impact Statement for NC 24 Improvements, Cumberland, Sampson and Duplin Counties, North Carolina; TIP Project No.: R-2303; FHW-E40809-NC; CEQ No.: 20100143

Dear Dr. Thorpe:

The U.S. Environmental Protection Agency Region 4 (EPA) has reviewed the subject document and is commenting in accordance with Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The North Carolina Department of Transportation (NCDOT) and the Federal Highway Administration (FHWA) are proposing to improve the approximate 39.1-mile NC 24 facility from east of Interstate 95 at Fayetteville to Interstate 40 at Warsaw in Cumberland, Sampson and Duplin Counties. The proposed project includes both widening of existing 2-lane sections as well as multi-lane new location bypasses.

The proposed project was placed in the NEPA/Section 404 Merger process beginning in 2001. Concurrence Point 2, Detailed Study Alternatives to be Carried Forward was signed by the full Merger team on February 13, 2001. Concurrence Point 2A, Bridging and Alignment Review was signed on October 20, 2005. This was essentially amended following additional design changes and incorporation of service roads on March 30, 2010. Concurrence Point 3, the Least Environmentally Damaging Practicable Alternative (LEDPA) was concurred on January 18, 2007, for the A Section, and August 15, 2007, for Sections B, C, D, E and F. Concurrence Point 4A, Avoidance and Minimization was concurred on December 13, 2007, for Sections A, B, C, D, E and F. EPA attended and participated in numerous other meetings on this proposed project, including several field meetings. Other Merger interagency coordination meetings are also detailed on Page xii of the FEIS.

EPA provided detailed comments on the Draft Environmental Impact Statement (DEIS) on September 6, 2006. EPA provided a rating of the DEIS as "EC-2", indicating that there were environmental concerns for the proposed project and that additional information was being requested, including additional avoidance and minimization measures. The NCDOT and FHWA have followed the recommended format as outlined

in 40 CFR Section 1502.10 which facilitated EPA's review of the FEIS. Most of EPA's specific comments and environmental concerns on the DEIS have been addressed either through participation with the Merger team or in the FEIS.

However, some issues need to be addressed further. EPA notes two environmental project commitments (i.e., "Green Sheets") in the FEIS concerning historic properties and archaeological sites. Environmental project commitments for bridging high quality wetland systems are not included in the Green Sheets. These are important commitments that were made during the Merger process and should be added to the "Green Sheets" and included in the ROD. Issues related to farmland impacts also need to be further discussed in the ROD. EPA's detailed review comments on the FEIS are provided in Attachment A.

Mr. Christopher Militscher will continue to work with NCDOT and FHWA and other agencies on the environmental coordination activities for this project. Please feel free to contact Mr. Militscher of my staff at (919) 856-4206 should you have specific questions concerning EPA's comments. We appreciate the ongoing coordination.

Sincerely,

A handwritten signature in dark ink, appearing to read "H. Mueller", with a long horizontal flourish extending to the right.

Heinz J. Mueller, Chief
NEPA Program Office

Cc: J. Sullivan, FHWA
S. McLendon, USACE
B. Wrenn, NCDENR

w/Attachment A

Attachment A
FEIS Detailed Review Comments
NC 24 Improvements from I-95 to I-40
Cumberland, Sampson and Duplin Counties
R-2303

Project Environmental Impacts

The FEIS includes a Summary of Impacts for the Preferred Alternative at Page xi. EPA notes that the table is generally comprehensive. However, wetland impacts of 50.78 acres are based on construction limits plus 10 feet. NCDOT and FHWA typically estimate wetland impacts based upon construction limits plus 25 feet. The summary table does not indicate if additional impacts resulting from recent design changes and service roads from the March 30, 2010, field meeting are included in the FEIS estimate. At NCDOT's request, the Merger team agreed to a slightly shorter bridge over the Little Coharie Creek that would potentially result in additional, but minimal, wetland impacts. The revised wetland and stream impacts should be clearly identified in the Record of Decision (ROD).

The preferred alternative is anticipated to have 201 residential relocations, 22 business relocations, 3 church relocations, 1 historic property effect, 68 impacted noise receptors, 51 hazardous material sites (including 7 hog farms), 807 acres of "prime and unique and State and locally important" farmland converted, 566 acres of terrestrial forest impacts, 9,351 linear feet of impacted streams (i.e., 2,792 linear feet perennial and 6,559 linear feet intermittent), and 12,200 linear feet of floodplain encroachment.

Avoidance and Minimization to Jurisdictional Resources

The FEIS includes several detailed tables including Tables 4-18a, b, c, and d that include avoidance and minimization efforts for jurisdictional resources including wetlands and streams. Overall, direct fill impacts to jurisdictional wetlands decreased from 78.77 acres to 50.78. Stream impacts were reduced from an original total of 10,781 linear feet to 9,351 linear feet. EPA and other Merger team agencies recognize NCDOT's initial efforts to avoid and minimize jurisdictional impacts by bridging high quality and expansive riverine wetland systems. The footnote contained at the end of Table 5 in Appendix A that identifies a potential reduction of the Concurrence Point 2A bridge lengths that may be discussed at Concurrence Point 4A and 4B meetings. Concurrence Point 4A has been completed for the project and the FEIS include the avoidance and minimization measures agreed to by Merger Team agencies. There have been several concurrence and field meetings that have specifically addressed bridge lengths for this proposed project. NCDOT recently requested another evaluation of the proposed bridge length at Little Coharie Creek following a Concurrence Point 4B hydraulic review meeting. There was a proposal that a culvert might suffice at this crossing and would cost less than a bridge. There is an existing bridge at the NC 24/Little Coharie Creek crossing that may have historically constricted these braided

riverine wetland systems. All of the Merger team agencies agreed that a bridge at least as long as the existing bridge on NC 24 would be needed for the new two lanes at Little Coharie Creek. EPA believes that the bridge lengths concurred on by Merger team agencies on August 18 and October 20, 2005, are still valid and should be included as environmental commitments for the proposed project.

Response to DEIS Comments

The FEIS includes responses to EPA's DEIS comments on pages 6-9 to 6-24. Numerous issues from EPA's September 6, 2006, comment letter have been adequately addressed during Merger meetings and in the FEIS responses. EPA notes that on Page 6-20 that none of the farmlands exceeded the NRCS assessment threshold. The letters from NRCS dated January 13, 2000 and March 12, 2001, also appear to confuse the issue as to what potentially impacted farmlands meet the threshold of being classified as being prime, unique and of State-wide or locally important. Sections of NC 24 that are proposed for widening would generally not rate sufficiently high enough to require special considerations for compensation under the Farmland Impact Conversion Rating forms. The FEIS provides further discussion and details of the issue on Pages 4-44 and 4-45. The footnote at the end of Table 4-13 indicates that none of the impacted farmlands are characterized as being prime, unique or of State-wide or locally important based upon the NRCS ratings. The impacts shown are based upon soil types, not the actual Land Evaluation Site Assessment (LESA) criteria. This is an important distinction in the Federal Farmland Protection Act (FFPA) of 1981 and NRCS regulations contained at 7 CFR Part 658.

The FEIS does not include a discussion concerning the North Carolina Department of Agriculture and Consumer Services (NCDACS) Voluntary Agricultural District (VAD) program or the North Carolina's 2005 law (i.e., House Bill 607) concerning farmland preservation and trust fund initiatives. Sampson County approved a VAD ordinance on August 20, 2001. Duplin County implemented a VAD ordinance on June 7, 2004. Cumberland County passed a VAD ordinance on November 20, 2007. These three counties are also working on Farmland Protection Plans. The FEIS does not address which farms that are potentially impacted are included or participating in the VAD or other preservation programs. According to another NCDACS website, 9 farms in Cumberland County, 41 farms in Duplin County, and 75 farms in Sampson County qualify as Century Farms. The FEIS does not identify these historic family farm operations or if any of might be impacted by the proposed project.

The FEIS states that constructed overpasses or underpasses for livestock, machinery, and drainage would potentially address agricultural fields severed by the project. However, NCDOT and FHWA do not anticipate that any of these specific farm access measures will be needed. The FEIS states that there is a total of 807 acres of farmland impacted. In addition, 7 hog farms (Sites #59, 60, 61, 62, 63, 65 and 66) are also potentially impacted to varying degrees based upon the information on Pages 4-41 to 4-43 of the FEIS. The FEIS does not include a discussion if the current agricultural operations at these hog farms will be significantly impacted by the proposed project. The

ROD for this proposed project should include relevant State regulations and policies and local ordinances concerning farmlands. Summary impact tables might also be footnoted to reflect the NRCS farmland rating criteria and FPPA requirements.

The FEIS includes a general response to EPA's comment on the Migratory Bird Treaty Act issues on Page 6-20 of the FEIS. During the numerous field trips for this project over the last ten years, EPA personnel have observed a substantial number of migratory birds in the project study area, including Barn swallows (*Hirundo rustica*) nesting in existing culverts and the undersides of bridges. As addressed in the FEIS, NCDOT proposes to further consult with the U.S. Fish and Wildlife Service on the issue of migratory birds, as appropriate.

The FEIS also includes a general response to EPA's comment on construction fill and invasive plant species on Page 6-23. EPA has identified several colonies of Japanese knotweed (*Reynoutria japonica*) between the Town of Clinton and Interstate I-40 along the existing railroad line adjacent to NC 24. EPA is specifically concerned about obtaining fill dirt sources for the new roadway that may contain these very damaging plant's rhizomes. There are few cost-effective solutions for eliminating this invasive species once it becomes established. Potential on-site mitigation efforts can also be adversely affected if this and other invasive plant species are provided the opportunity during initial site establishment activities. EPA can provide additional details to NCDOT as to the location of the Japanese knotweed colonies that are currently known to exist in the project study area.

The FEIS includes a general response to EPA's comment on environmental commitments on Page 6-24. EPA is specifically requesting that bridge length decisions agreed to by all of the Merger Team agencies be included in the ROD, including the crossings at South River, Big Swamp, Little Coharie Creek, Great Coharie Creek, Six Runs Creek, and Bearskin Swamp. The proposed bridges at these locations are an important environmental commitment for Section 404 avoidance and minimization measures.

The FEIS includes updated air quality information for Cumberland County on Page 4-26. In addition, EPA also acknowledges the FEIS information concerning future carbon monoxide concentrations, future emissions of other pollutants and Mobile Source Air Toxics (MSATs). The FEIS did not identify any near-roadway, potentially sensitive receptors such as day care centers, nursing homes, or hospitals.